



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,581	11/13/2001	Samuel H. Russ	A-6885	6608
5642	7590	10/04/2007		
SCIENTIFIC-ATLANTA, INC.			EXAMINER	
INTELLECTUAL PROPERTY DEPARTMENT			HUYNH, SON P	
5030 SUGARLOAF PARKWAY				
LAWRENCEVILLE, GA 30044			ART UNIT	PAPER NUMBER
			2623	
			NOTIFICATION DATE	DELIVERY MODE
			10/04/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail@sciatl.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/008,581	RUSS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Son P. Huynh	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 24 July 2007.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-21 and 52-63 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-21 and 52-63 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 November 2001 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to amended claims 1-21, 52-63 have been considered but are moot in view of the new ground(s) of rejection.

Claims 22-51 and 64-113 have been canceled.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 61 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear whether "the transmitter" recited in claim 61, line 3, refers to "a first transmitter" or "a second transmitter" recited in claim 52. "the transmitter" is interpreted as best understood as – the first transmitter.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7, 15-21, 52-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US 20050028208 – hereinafter referred as E208) in view of Miura et al. (US 6,996,837 B1).

Note: US 20050251827 (referred as E827) and US 2005/0262542 A1 (referred as DeWeese) are incorporated by reference in their entirety in E208 (see E208, paragraphs 0087, 0179,0227).

Regarding claim 1, E208 discloses a master set top terminal (STT) (interpreted as primary user television equipment or local server connected to multiple secondary user television equipments and remote access device 24— see include, but are not limited to, figures 3-5, 29, 31, paragraph, 0194; E827: paragraph 0072—Note: since E208 discloses the remote access device may be connected via remote access link 19 to one of the guides (user television equipments) – paragraph 0087, the examiner interprets the remote access device is connected to primary user television equipment/guide), comprising:

a first tuner, configured to receive a first user input via a first interface, the first tuner further configured to, in response to receiving the first user input, tune to a television signal from a received multiplexed signal into a first tuned television signal (interpreted as a tuner in set top box at primary user television equipment, configured to receive a first user including tuning to a channel via user input device 52 of the remote access device, and configured to, in response to receiving the channel selection input from the user input device 52 of a remote access device, tune to a television signal associated with the selected channel from the signal received over communication network 20 into a first tuned television signal – see include, but are not limited to, figures 2a, 2c, 3-5, paragraphs 0130, 0134, 0138; wherein “received multiplexed signal” is interpreted as signal received over communication path comprises plurality of components such as video, audio, program guide data, etc. – see include, but are not limited to, paragraphs 0068-0069);

a second tuner, configured to receive a second user input via a second interface, the second tuner further configured to, in response to receiving the second user input, tune the television signal from the received multiplexed signal, into a second tuned television signal (e.g., tuner in the set top box at the primary television equipment, configured to receive user input including channel selection, volume control, etc. via user interface such as user input device at the primary user television equipment, and the tuner, in response to receiving user selection of a channel, tune the television signal from the signal received over communication network, into a second tuned television signal correspond to television program/channel selected by the user at the primary

television equipment – see include, but are not limited to, figures 2-3,29,31, paragraphs 0080-0081, 0089, 0187-0188, wherein “received multiplexed signal” is interpreted as signal received over communication path comprises plurality of components such as video, audio, program guide data, etc. – see include, but are not limited to, paragraphs 0068-0069), the second tuner is configured for providing at least one tuned signal for display at a second viewing device, the second viewing device being co-located with the master STT (interpreted as the tuner at the primary television equipment, in response to receiving channel selection via the user interface at the primary television equipment, providing at least one of the selected signal for display on television being located at the primary television equipment – see include, but are not limited to, figures 3-4, 29, 31, paragraphs 0080-0081, 0089, 0187-0188);

E208 further discloses if the program is recorded by remote program guide access device, the programming, may, for example, be digitized and transmitted as a MPEG-2 data stream over remote access remote access link 19 using access communications (see include, but are not limited to, paragraph 0164). The remote access device further comprises a suitable monitor, LCD, or other suitable display device for display the selected video – see include, but are not limited to, paragraphs 0092, 0170). Thus, it is inherent that the master STT (primary television equipment) comprises an encoder coupled to the first tuner and configured to receive the first tuned television signal, the encoder further configured to digitally encode the first tuned television signal; and a transmitter coupled to the encoder configured to transmit the encoded signal to the remote STT (e.g., remote access device) to be displayed on a

first viewing device so that the selected program be digitized and transmitted as a MPEG-2 data stream over remote access link using access communications and the selected program is display on a suitable display device at the remote location.

a receiver configured to receive a first control signal from the remote STT corresponding to a first user input (e.g., communication device configured to receive control signal such as channel change, volume change, etc. from the remote access device corresponding to a user input to change channel, to change volume, to select a channel to tune to, etc. – see include, but are not limited to, figures 4-5, 29, 31, paragraphs 0071-0072, 0134, 0138);

E208 further discloses the control circuitry in the set top box, in response to signal received from user interface, to perform the corresponding function. The signal received from user interface including channel change, volume change, etc.; and the currently tuned channel is encoded and transmitted to the remote access device for display on the display device at the remote site (see include, but are not limited to, figures 4, 29, 31, paragraphs 0086-0087, 0089-0090, 0134, 0138, 0164, 0170). Thus, a controller (e.g., control circuitry in primary television equipment) coupled to the receiver (e.g., communication device 51 or 27) and configured to accept the first control signal from the receiver (e.g., accept channel change signal received from communication device), the controller further configured to instruct the first tuner to change the first tuned television signal in response to the first control signal (e.g., control circuitry configured to instruct the tuner to change the television signal being tuned in response to channel change signal). As a result tuning to another channel in response to channel

change signal, the transmitter transmits a changed encoded signal to the remote STT (e.g. remote access device) for display on the first viewing device (display device at the remote location);

E208 further discloses the second viewing device (e.g. television display at the primary television equipment) being different than the first viewing device (e.g., display device at remote location – see include, but are not limited to, figures 3-5, 29,31).

However, E208 does not explicitly disclose the second tuner is configured as a dedicated tuner for providing at least one tuned signal for display at a second viewing device, a Radio Frequency driver coupled to the second tuner, the RF driver configured to facilitate transmission of an independent signal to second viewing device.

Miura discloses a system comprising master set top terminal (STT) – interpreted as master terminal 1, and a remote STT (slave terminal), the master STT comprises first tuner (TA), configured to receive a first user input via a first interface (e.g., user interface 2A), and second tuner (TB), configured to receive a second user input via second interface (user input via user interface 1A), wherein the second tuner is configured as a dedicated tuner for providing at least one tuned signal for display at a second viewing device, the second viewing device being co-located with the master STT (interpreted as tuner TA is configured for providing at least one tuned signal for display at TV 3, the TV 3 being connected with the master terminal (see include, but are not limited to, figures 1-3, col. 1, line 43-col. 2, line 16, col. 5, lines 17-31); a Radio Frequency driver coupled to the second tuner the RF driver configured to facilitate transmission of an independent signal to the second viewing device (interpreted

microcontroller, with various components, coupled to second tuner TB, configured to control the tuners to tune to different signal simultaneously and therefore, a signal tuned by tuner TB is independently transmitted to viewing device at the slave terminal (e.g., TV 5), the second viewing device being different than the first viewing device (TV receiver 3 being different than TV receiver 5) – see include, but are not limited to, figures 1-3, col. 1, lines 36-63, col. 2, lines 3-22, col. 4, lines 1-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify E208 with the teaching as taught by Miura in order to at least reduce cost for slave terminal and/or allow multiple users tuning to different programs without interfering each other.

Regarding claims 2-3, E208 in view of Miura teaches a “master STT” as discussed in the rejection of claim 1. Neither the reference explicitly disclose the changed encoded signal is displayed at the first viewing device within two seconds from the remote STT receiving the user input, the changed encoded signal is displayed at the first viewing device within a half second from the remote STT receiving the user input. However, E208 further discloses the in response to user input receiving at the remote access device, the encoded signal associated with the changed channel is transmitted and for display on display device at the remote location (see include, but are not limited to, paragraphs 0134, 0138, 0143, 0164). One skilled in the art can select any delay time period to display the encoded signal at the first receiving device (e.g., display device at remote access device) as desired by the user but limited to the capability and

characteristics of the transmission medium and devices communicating on the medium between the devices. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in E208 in view of Miura the time period within two seconds, within a half-second as desired by the user but limited to the capability and/or characteristics of the transmission medium and devices communicating on the medium in order to yield a predictable results.

Regarding claim 4, E208 in view of Miura discloses the master STT at discussed in the rejection of claim 3. E208 further discloses "wherein transmitter and receiver operate according to a wireline standard selected from at least one of the flowing: HomePlug and HomePNA (e.g., the communication device/transceiver is operate according to a wireline standard such as power line, or telephone line – see include, but are not limited to, E208: paragraphs 0086, 0087, 0094, 0194).

Regarding claim 5, E208 in view of Miura discloses the master STT at discussed in the rejection of claim 2. E208 further discloses communication device may be, for example, a communication port (e.g., a serial, parallel port, USB port, etc.), modem (e.g., any suitable analog or digital modem, cellular modem, or cable modem), network interface card, wireless transceiver (e.g., an infrared transceiver or other suitable transceiver), or other suitable communication device (paragraph 0076); remote access link 19 may include any suitable transmission medium. Link 19 may include, for example, a computer network or internet link, an in home network link, an infrared link, a radio

frequency link, a satellite link, any other suitable transmission link or suitable combination of such links (see include, but are not limited to, paragraph 0094). It would have been obvious to one of ordinary skill in the art that the transmitter and receiver operate according to a wireless standard selected from at least one of the following: IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, Bluetooth 2.0, HomeRF 2.0, HiperLAN/2, and Ultra-Wideband standards in order to yield a predictable results.

Regarding claim 6, E208 in view of Miura discloses the master STT at discussed in the rejection of claim 5. E208 further discloses the video encoder uses a form of digital compression (digitizes and transmits video as MPEG-2 data stream – see include, but is not limited to, paragraph 0164).

Regarding claim 7, E208 in view of Miura discloses the master STT at discussed in the rejection of claim 2. E208 discloses remote access device may, for example, run a standard remote access client such as a Windows (paragraph 0096). The functions of control circuitry in television equipment may be integrated into an advanced television receiver, personal computer television (PC/TV), or any other suitable arrangement (paragraph 0088). Remote access device may be any suitable personal computer (PC), portable computer (e.g., a notebook computer), PDA, etc. (paragraph 0092). Non-program guide application such as chat application may be implemented on a set top box. Chat application services that allow users to exchange chat messages with other users in real time; and the video, including real time video are played on the viewing

display including a computer (see include, but are not limited to, paragraph 0179, DeWeese: figures 9, 14, 16). Therefore, video encoder is selected from at least one of Microsoft NetMeeting, Windows Media Player, and Real Player in order to yield predictable results (e.g. Real Player for playing real chat audio, real chat video).

Regarding claim 15, E208 in view of Miura discloses a “master STT” as discussed in the rejection of claim 1. E208 further discloses the received multiplexed signal further comprises a program information component (e.g. video data, voice data, program guide information, etc. – see include, but are not limited to, paragraphs 0068-0069).

E208 further discloses a master STT comprises program guide generator configured to receive the program information from the received multiplexed signal and configured to generate a program guide therefrom that is transmitted by the transmitter upon a user request for the program guide at the remote STT (the user television equipment comprises control circuitry and other components configured to receive program guide information from main facility and/or television facility in the signal received over communication path 20 and configured to generate a program guide therefrom that is transmitted by the transmitter over link 19 upon a user request for the program guide at the remote access device— see include, but not limited to, figures 2a-2d, 6a-8, paragraphs 0067-0069, 0079, 0082 0102, 0109-0110).

Regarding claim 16, E208 in view of Miura discloses a “master STT” as discussed in the rejection of claim 1. E208 further discloses the “master STT” comprises an Internet

connection (e.g. primary television equipment comprises modem connected to Internet – see include, but are not limited to, paragraphs 0079, 0086, 0090, 0093-0094), and the transmitter is capable of transmitting content derived from the Internet connection to the remote STT (the transmitter in television equipment is capable of transmitting content such as program guide data, chat, email, etc. from Internet to the remote access device – see include, but are not limited to, paragraphs 0079, 0086, 0090, 0093-0094, 0097-0101, 0105, 0148).

Regarding claims 17-18, the limitations as claimed that correspond to the limitations of claim claims 1-3 are analyzed as discussed with respect to the rejections of claims 1-3.

Regarding claim 19, E208 in view of Miura discloses the master STT as discussed in the rejection of claim 17. E208 does not explicitly disclose the tune digital television signal is re encoded at a lower bit rate prior to being transmitted to the remote STT. However, E208 discloses the tuned digital television signal is re encoded as MPEG-2 or any other suitable format prior to being transmitted to the remote access device – see include, but are not limited to, paragraphs 0127, 0135, 0164). It would have been obvious to one of ordinary skill in the art to incorporate E208 with re encoding the tuned signal at a lower bit rate prior to being transmitted to the remote STT in order to improve bandwidth utilization for transmitting the signal.

Regarding claim 20, E208 in view of Miura does not explicitly disclose MPEG-2 signal at a 3 Mbps bit-rate, and the re-encoded signal includes a lower quality video signal. However, E208 discloses the digital television signal includes an MPEG-2 or any suitable format (see include, but are not limited to, paragraphs 0127,0135,0164). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate in E208 MPEG-2 at 3 Mbps, and the re-encoded signal includes lower quality video signal in order to improve bandwidth used for transmitting the signal.

Regarding claim 21, the additional limitation as claimed correspond to the additional limitation in claim 20, wherein the limitation “low bit rate MPEG-2” is interpreted as correspond to 3Mbps bit rate MPEG – 2 signal in claim 20 and are analyzed as discussed with respect to the rejection of claim 20.

Regarding claim 52, the limitations of a master STT in television distribution system correspond to the limitations of the master STT as claimed in claim 17, wherein the second receiver correspond to “a receiver” and the second transmitter corresponds to “a transmitter”, and are analyzed as discussed in the rejection of claim 17, “within three second...” is analyzed as “within two seconds...” in claim 17. E208 further discloses a remote STT terminal (interpreted as remote access device or secondary television equipment) comprising:

a first receiver configured to receive an encoded video signal from a mater STT (e.g., communications device/transceiver configured to receive an MPEG-2 encoded

video signal from the primary television equipment – see include, but are not limited to, figures 2a-5, 29, 31, paragraphs 0092, 0134, 0164);

E208 further discloses encoded MPEG-2 signal are transmitted to the remote access device and remote access device comprises control circuitry and other components for processing the encoded signal for display on the display device (see include, but are not limited to, figure 5, paragraphs 0092, 0134, 0164, 0170). Thus, the remote access device must comprises a decoder (e.g., including in control circuitry) coupled to the first receiver (e.g., communications device) and configured to translate the encoded video signal into a decoded video signal suitable for a first viewing device so that the encoded MPEG-2 signal is processed and for display on the display device;

a user interface (e.g., user interface 52) configured to receive a first user input (e.g. user select a television signal/channel, or select to change channel ) and the user interface further configured to convert the received first user input to a control signal (e.g., the user interface configured to convert the number, key, etc. entered by the user to a control signal for control channel change, volume change, etc. – see include, but are not limited to, figure 5, paragraphs 0092, 0108, 0134, 0138);

a first transmitter (e.g., user interface receiver/transmitter in the communications device – figure 5) coupled to the user interface and sending the control signal to the master STT to achieve a change in the encoded video signal (–user interface receiver or transmitter in the communications device coupled to the user interface and send the control signal associated with the user input key/number to the primary user television

equipment to perform channel change in the encoded MPEG-2 video signal- see include, but not limited to, figure 5, paragraphs 0092, 0108, 0134, 0138)

the first receiver configured to receive a change in the encoded video signal responsive to the control signal, wherein the remote STT sends the change to the viewing device (e.g., receiver in communications device 58 configured to receive encoded MPEG-2 signal responsive to the channel change signal, the remote access device sends the change to the display device for display to the user – see include, but are not limited to, figure 5, paragraphs 0092, 0134, 0138).

Regarding claims 53-56, the additional limitations as claimed correspond to the additional limitations as claimed in claims 2-3, 6-7, and are analyzed as discussed with respect to the rejections of claims 2-3, 6-7.

Regarding claim 57, E208 further discloses the encoding format includes MPEG-2 (see include, but are not limited to, paragraph 0164).

Regarding claim 58, E208 further discloses the encoding format include MPEG-2 or in any suitable format (paragraphs 0127, 0135, 0164). However, E208 in view of Miura does not explicitly disclose the encoding format include H.263. Official Notice is taken that encoding format includes H.263 is well known in the art. For example, encoding videoconferencing as low bit rate compressed format using H.263. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made

to modify E208 in view of Miura with the well-known teaching in the art in order at least to improve bandwidth utilization for transmission of data.

Regarding claim 59, E208 further discloses the encoding format include MPEG-2 or in any suitable format (paragraphs 0127, 0135, 0164). However, E208 in view of Miura does not explicitly disclose the encoding format include low bit rate MPEG-2. Official Notice is taken that encoding format includes low bit rate MPEG-2 is well known in the art. For example, encoding data in 3Mbps MPEG-2. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify E208 in view of Miura with the well-known teaching in the art in order at least to improve bandwidth utilization for transmission of data.

Regarding claim 60, the additional limitation of the system as claimed correspond to the additional limitations of the master STT as claimed in claim 15, and are analyzed as discussed with respect to the rejection of claim 15.

Regarding claim 61, E208 further discloses the remote STT further comprises a web browser, and the master STT comprises an Internet connection coupled to the transmitter, allowing the web browser to browse a plurality of websites (interpreted as the secondary user television equipment or remote access device comprises a browser, and the primary television equipment comprises an Internet connection such as modem coupled to the transmitter interfaced with link 19, allowing the web browser to access

websites to retrieve on-line program guide, or non-program guide applications from Internet - see include, but are not limited to, figures 2a-2d, 4-6c, paragraphs 0006, 0020, 0079, 0110, 0027, 0079, 0094, 0110, 0150, 0176-0180).

Regarding claim 62, E208 further discloses the remote STT further comprises an Internet connection coupled to a web browser, allowing the remote STT to browser a plurality of websites (e.g., modem in communications device of remote access device or secondary user television equipment coupled to a web browser in the secondary user television equipment or in the remote access device, allowing the web browser to access websites to retrieve on-line program guide, or non-program guide applications from Internet - see include, but are not limited to, figures 2a-2d, 4-6c, paragraphs 0006, 0020, 0079, 0110, 0027, 0079, 0094, 0110, 0150, 0176-0180)

Regarding claim 63, E208 further discloses the master STT further comprises a web browser and an Internet connection and is capable of transmitting an image of the web browser and website to the remote STT (interpreted as the primary user television equipment comprises a web browser and an Internet connection such as modem for accessing on line program guide, or other non-program guides applications from Internet and transmitted on-line program guide, non-program guide application displayed on the web browser and website to the remote access device or secondary user television equipment – see include, but are not limited to, figures 2a-2d, 4-6c, paragraphs 0006, 0020, 0079, 0110, 0027, 0079, 0094, 0110, 0150, 0176-0180).

6. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over E208 in view of Miura as applied to claim 6 above, and further in view of Van Der Schaar et al. (US 6,697,426 B1).

Regarding claims 8-9, E208 in view of Miura discloses a “master STT” as discussed in the rejection of claim 6. E208 further discloses encoding the signal into MPEG-2 or any format suitable for transmission over communications link between the primary user television and remote access device/or secondary user television equipments – see include, but are not limited to, figures 2-6c, 29, 31, paragraphs 0127, 0135, 0164. However, E208 in view of Miura does not explicitly disclose low latency between the reception of the first control signal and the transmission of changed television signal is achieved by immediately encoding and transmitting a lower quality video signal and then transmitting higher quality video signal after a period of time during which the lower quality video signal is transmitted.

Van Der Schaar discloses immediately encoding and transmitting a lower quality video signal (encoding and transmitting only base layer of the stream at first quality level in the first period, for example— see figure 5, col. 3, lines 55-65) and then transmitting higher quality video signal after a period of time during which the lower quality video signal is transmitted (e.g., transmitting, at the same time, base layer frame B2 and the corresponding enhancement layer frame E2 during third period col. 4, figure 5, col. 4, lines 8-14; the combination of enhancement layer E2 and base layer E2 is higher quality

video signal). As a result of encoding and transmitting only base layer first, the low latency between the reception of the first control signal and the transmission of the changed television is achieved. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify E208 in view of Miura to use the teaching as taught by Van Der Schaar in order at least to reduce the amount of memory for mobile application and other lower power consumption (col. 3, lines 1-4) or to reduce latency for transmitting video to the user.

Regarding claim 10, E208 in view of Miura and Van Der Schaar teaches a "master STT" as discussed in the rejection of claim 9. Van Der Schaar further discloses the decoder receives and decodes the lower quality video (e.g., base layer only) during first period; the decoder then receives higher quality video (base layer frame and enhancement layer fame) during third period, which is after the first period (figure 5, col. 3, line 55-col. 4, line 15). Van Der Schaar further discloses the encoder will produce a stream of base layer frames and a stream of enhancement layer frames according to the transmission order (col. 4, lines 30-32). Thus, it would have been obvious to one of ordinary skill in the art that the period of lower quality video transmission allows the higher quality video signal to be encoded for transmission (for example, first period or second period for transmitting base layer I1 or base layer P3 allows the base layer frame B2 and enhancement layer frame E2 to be encoded) thereby allowing encoding of the higher quality video (e.g., base layer frame B2 and corresponding enhancement layer E2) and lower quality video (e.g., base layer frame only) performed simultaneously in order to

improve efficiency in data processing (e.g., reducing latency and minimize amount of memory for storing processed data).

Regarding claims 11-13, the additional limitations as claimed correspond to the additional limitations as claimed in claims 57-59, and are analyzed as discussed with respect to the rejections of claims 57-59.

Regarding claim 14, E208 discloses encoding the signal into MPEG-2 or any suitable format for transmitting to the remote access device or secondary user television equipment (see include, but are not limited to, paragraphs 0127, 0135, 0164). The remote access device or secondary television equipment receives the encoded television signal and decodes it for display on the viewing device (see include, but are not limited to, paragraphs 0092, 0134-0138). However, E208 does not explicitly disclose the transmitted signal includes an encoding parameter enabling the remote STT to decode the transmitted signal using multiple decoding algorithms according to the encoding parameter. Official Notice is taken that providing encoding parameter in the transmitted signal for enabling the receiving device to decode the transmitted signal using multiple decoding algorithms according to the encoding parameter is well known in the art. For example, transmitting encoding parameter including encoding description in the transmitted signal, where the encoding description enable the receiving device to identify and decode the transmitted signal according to the encoding description. Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify E208 in view of Miura with the well-known teaching of providing encoding description in the transmitted signal in order to allow the encoded signal to be identified and decoded faster.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Calderone (US 6,588,017 B1) discloses master and slave subscriber stations for digital video and interactive services.

Suematsu et al. (US 7,020,890) discloses millimeter wave transmitter, millimeter wave receiver, and millimeter wave communication system enabling simplification of wiring and improvement in degree of freedom for setting receiver in receiving system for terrestrial broadcasting and satellite broadcasting.

Gatto et al. (US 2002/0174444 A1) discloses trusted transactional set top box.

McNeill et al. (US 6,421,706 B1) discloses multicast and unicast internet protocol content distribution having a feedback mechanism for real time and store and forward information transfer.

Weaver et al. (US 6,578,070) discloses method and apparatus for implementing seamless playback of continuous media feeds.

Eames et al. (US 6,317,884) discloses video, data and telephone gateway.

Streck et al. (US 4,916,532) discloses television local wireless transmission and control.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 9:00 - 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Son P. Huynh

September 24, 2007

A handwritten signature in black ink, appearing to read "Son P. Huynh".